

AMENDMENTS TO THE CLAIMS

1. **(currently amended)** An integrated component mounting system for use in an x-ray tube, comprising:

- (a) a shaft defining a longitudinal axis;
- (b) ~~a~~an x-ray tube component disposed on said shaft; and
- (c) means for exerting and transmitting a radial force, wherein said means for exerting and transmitting a radial force controls radial movement of said x-ray tube component with respect to said longitudinal axis defined by said shaft.

2. **(Original)** The integrated component mounting system as recited in claim 1, wherein said means for exerting and transmitting a radial force substantially prevents radial movement of said component when said component is in a desired radial position.

3. **(Original)** The integrated component mounting system as recited in claim 1, wherein said means for exerting and transmitting a radial force at least partially controls axial movement of said component along said longitudinal axis defined by said shaft.

4. **(Original)** The integrated component mounting system as recited in claim 3, wherein said shaft further comprises a support member and said means for exerting and transmitting a radial force cooperates with said support member to substantially prevent axial movement of said component when said component is in a desired axial position.

5. **(Original)** The integrated component mounting system as recited in claim 1, wherein said means for exerting and transmitting a radial force moves said component to a desired radial position during assembly of the integrated component mounting system.

6. **(Original)** The integrated component mounting system as recited in claim 5, wherein when said component is in said desired position, said component is centered with respect to said longitudinal axis.

7. **(Original)** The integrated component mounting system as recited in claim 5, wherein when said component is in said desired position, said component is off-center with respect to said longitudinal axis.

8. **(Original)** The integrated component mounting system as recited in claim 1, wherein said means for exerting and transmitting a radial force automatically centers said component with respect to said longitudinal axis during assembly of the integrated component mounting system.

9. **(Original)** The integrated component mounting system as recited in claim 1, wherein said means for exerting and transmitting a radial force secures said component to said shaft.

10. **(Original)** The integrated component mounting system as recited in claim 1, wherein said means for exerting and transmitting a radial force transmits an axial force and a

radial force to said component, and said transmission of said axial force and said transmission of said radial force occurs simultaneously.

11. **(Original)** The integrated component mounting system as recited in claim 1, wherein said means for exerting and transmitting a radial force comprises:

- (a) a nut configured to engage said shaft;
- (b) a first shaped surface defined by said component; and
- (c) a second shaped surface defined either by said shaft or by said nut and arranged for contact with said first shaped surface.

12. **(Original)** The integrated component mounting system as recited in claim 1, wherein said means for exerting and transmitting a radial force comprises:

- (a) a nut configured to engage said shaft;
- (b) an interface structure that is attached to the component and defines a first shaped surface; and
- (c) a second shaped surface defined either by said shaft or by said nut and arranged for contact with said first shaped surface.

13. **(currently amended)** The integrated component mounting system as recited in claim 1, wherein said x-ray tube component comprises a an x-ray tube target anode.

14. **(currently amended)** An integrated component mounting system for use in an x-ray tube, comprising:

- (a) a shaft including a support member and defining a longitudinal axis;
- (b) a nut configured to engage said shaft;
- (c) a an x-ray tube target anode component that defines a first shaped surface and is disposed on said shaft between said nut and said support member; and
- (d) a second shaped surfaced defined either by said shaft or by said nut and arranged for contact with said first shaped surface.

AI 15. **(Original)** The integrated component mounting system as recited in claim 14, wherein said first shaped surface defines a first inclination angle and said second shaped surface defines a second inclination angle.

16. **(Original)** The integrated component mounting system as recited in claim 14, wherein said second shaped surface is defined by said shaft.

17. **(Original)** The integrated component mounting system as recited in claim 14, wherein said second shaped surface is defined by said nut.

18. **(Original)** The integrated component mounting system as recited in claim 14, wherein said first and second shaped surfaces each describe a portion of a circular curve.

19. **(Original)** The integrated component mounting system as recited in claim 14, wherein said first and second shaped surfaces each describe a parabolic curve.

20. **(Original)** The integrated component mounting system as recited in claim 14, wherein said first shaped surface is convex and said second shaped surface is concave.

21. **(Original)** The integrated component mounting system as recited in claim 14, wherein said first shaped surface is concave and said second shaped surface is convex.

22. **(amended)** The integrated component mounting system as recited in claim 14, wherein said second shaped surface is defined by said nut, and a third shaped surface is defined by said x-ray tube target anode component and said third shaped surface is arranged for contact with a fourth shaped surface defined by said shaft.

23. **(Original)** The integrated component mounting system as recited in claim 22, wherein at least two of said first, second, third, and fourth shaped surfaces describe a portion of a circular curve.

24. **(Original)** The integrated component mounting system as recited in claim 22, wherein at least two of said first, second, third, and fourth shaped surfaces describe a parabolic curve.

25. **(Original)** The integrated component mounting system as recited in claim 22, wherein said first, second, third, and fourth shaped surfaces each define an inclination angle.

26. **(cancelled).** The integrated component mounting system as recited in claim 22, wherein said component comprises a target anode.

27. **(Original)** An x-ray tube, comprising:

- (a) a vacuum enclosure;
- (b) a cathode disposed within said vacuum enclosure; and
- (c) an integrated component mounting system comprising:
 - (i) a shaft defining a longitudinal axis;
 - (ii) a target anode disposed on said shaft and positioned within said vacuum enclosure so as to receive electrons emitted by said cathode; and
 - (iii) means for exerting and transmitting a radial force, wherein said means for exerting and transmitting a radial force controls radial movement of said target anode with respect to said longitudinal axis defined by said shaft.

28. **(Original)** The x-ray tube as recited in claim 27, wherein said means for exerting and transmitting a radial force substantially prevents radial movement of said target anode when said target anode is in a desired radial position.

29. **(Original)** The x-ray tube as recited in claim 27, wherein said means for exerting and transmitting a radial force at least partially controls axial movement of said target anode along said longitudinal axis defined by said shaft.

30. **(Original)** The x-ray tube as recited in claim 27, wherein said means for exerting and transmitting a radial force moves said target anode to a desired radial position during assembly of said integrated component mounting system.

31. **(Original)** The x-ray tube as recited in claim 27, wherein said means for exerting and transmitting a radial force automatically centers said target anode with respect to said longitudinal axis during assembly of said integrated component mounting system.

32. **(Original)** The x-ray tube as recited in claim 27, wherein said means for exerting and transmitting a radial force transmits an axial force and a radial force to said target anode, and said transmission of said axial force and said transmission of said radial force occurs simultaneously.

33. **(Original)** The x-ray tube as recited in claim 27, wherein said means for exerting and transmitting a radial force comprises:

- (a) a nut configured to engage said shaft;
- (b) a first shaped surface defined by said target anode; and
- (c) a second shaped surface defined either by said shaft or by said nut and arranged for contact with said first shaped surface.

34. **(Original)** The x-ray tube as recited in claim 33, wherein said first shaped surface defines a first inclination angle and said second shaped surface defines a second inclination angle.

35. **(Original)** The x-ray tube as recited in claim 33, wherein said second shaped surface is defined by said shaft.

36. **(Original)** The x-ray tube as recited in claim 33, wherein said second shaped surface is defined by said nut.

37. **(Original)** The x-ray tube as recited in claim 33, wherein said second shaped surface is defined by said nut, and a third shaped surface is defined by said target anode and said third shaped surface is arranged for contact with a fourth shaped surface defined by said shaft.

38. **(Original)** The x-ray tube as recited in claim 33, wherein said first and second shaped surfaces each describe a portion of a circular curve.

39. **(Original)** The x-ray tube as recited in claim 33, wherein said first and second shaped surfaces each describe a parabolic curve.

40. **(amended)** An integrated component mounting system for use in an x-ray tube, comprising:

- (a) a shaft including a support member and defining a longitudinal axis;
- (b) a nut configured to engage said shaft;
- (c) an interface structure defining an opening and a first shaped surface;

- (d) ~~a~~an x-ray tube component that defines an opening wherein said interface structure is received, and said x-ray tube component is disposed on said shaft between said nut and said support member so that said shaft is received within said opening defined by said interface structure; and
- (e) a second shaped surfaced defined either by said shaft or by said nut and arranged for contact with said first shaped surface.

41. **(Original)** The integrated component mounting system as recited in claim 40, wherein said second shaped surface is defined by said shaft.

42. **(Original)** The integrated component mounting system as recited in claim 40, wherein said second shaped surface is defined by said nut.

43. **(Original)** The integrated component mounting system as recited in claim 40, wherein said first shaped surface defines a first inclination angle and said second shaped surface defines a second inclination angle.

44. **(Original)** The integrated component mounting system as recited in claim 40, wherein said first and second shaped surfaces each describe a portion of a circular curve.

45. **(Original)** The integrated component mounting system as recited in claim 40, wherein said first and second shaped surfaces each describe a parabolic curve.

46. (Original) The integrated component mounting system as recited in claim 40,
wherein said component comprises a target anode.
